

Heng Yu
Kitchen Video System (KVS)
User Manual

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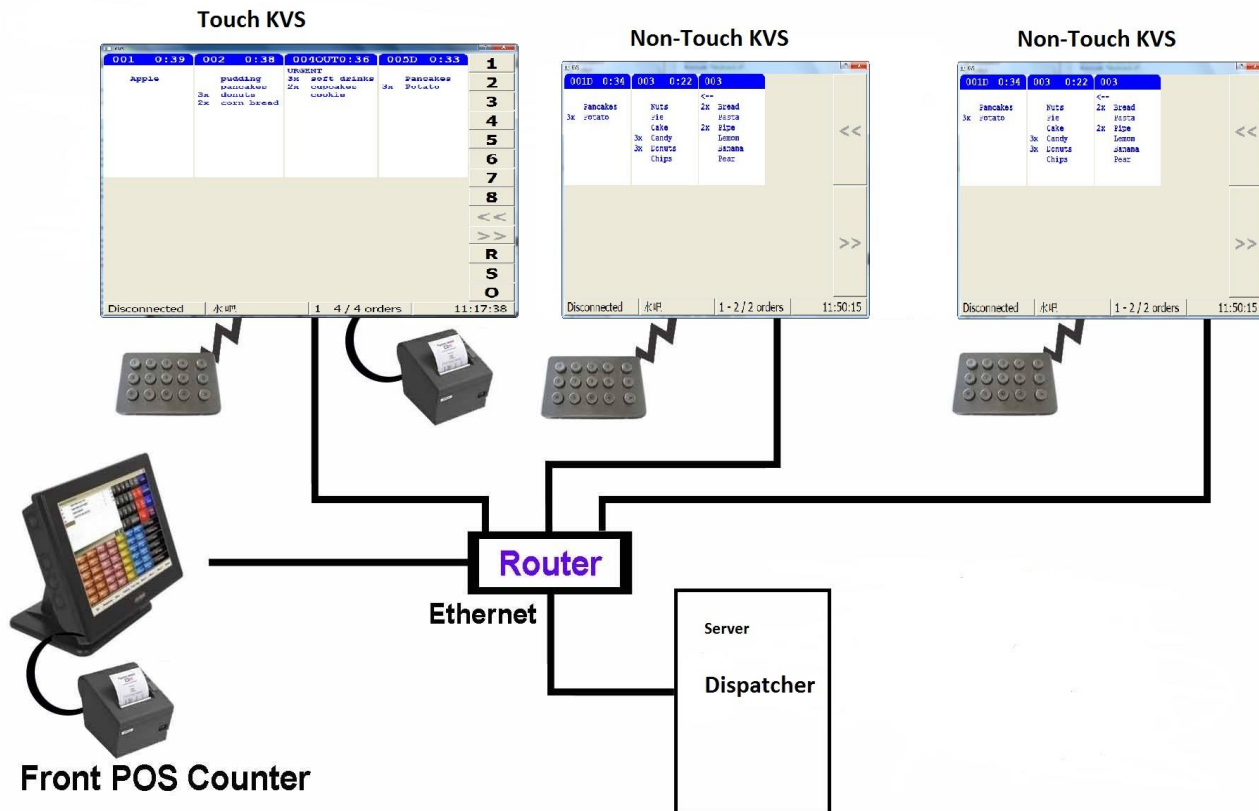
1. Introduction

Heng Yu Kitchen Video System (KVS) is designed to display all the order contents on a robust Kitchen Display, replacing the existing kitchen thermal printer. Orders from the POS system can be delivered easily to the Heng Yu KVS via the Ethernet. To avoid any loss of the order printout, the orders are clearly showed and easily navigated as well as the progress status on the screen inside the kitchen or bar counter. Heng Yu KVS can deliver the specific item according to the different KVS devices, the kitchen chefs or counter operators can focus on their jobs.

This document is described about the operation of Heng Yu KVS and the KVS device itself.

2. Heng Yu KVS

The Heng Yu KVS contains one dispatcher, one Touch KVS device and one to many non-touch KVS devices. Each KVS device connects with Heng Yu keypad(metal bump bar MK15E) or USB keyboard. The printer can be connected to touch KVS to print the removed items from non-touch KVS.



System requirement:

1. Front POS counter
2. router
3. (optional) printer connects with touch version KVS

The following are Heng Yu KVS

4. Server that installed Heng Yu dispatcher
5. one KVS device that installed touch software version
6. one to many KVS devices that installed non-touch software version
7. Heng Yu keypads(metal bump bar MK15E) or USB keyboard

2.1 Operations

In this system, Touch KVS is located at the bar counter and Non-touch KVSs are put to the different location of kitchen. The role of Touch KVS is to receive all orders with items, print the items that are finished from chefs and remove the items from Non-touch KVS. The Non-touch KVSs are to receive the specified items (e.g. drink) that is handled by this location of chef (e.g. drink bar) in the order, bump out the items after finished and notify the touch KVS.

There is an example to show how to operate. When a lunch set is bought, The first thing of the front POS counter to do is to send the order data to the dispatcher. The dispatcher receives the order data and sends the corresponding items to the corresponding non-touch KVSs. For example, coffee for Drink non-touch KVS and pork rice for Kitchen non-touch KVS. At the same time, the dispatcher sends this order information to the touch KVS showing all items of this order and their progress status.

When the chef finishes to cook the pork rice, the chef can bump out this item through keyboard from non-touch KVS. This item will be removed from non-touch KVS and change color of this item in Touch KVS to identify this item is finished. If all items in this order are finished, the order can be removed from Touch KVS.

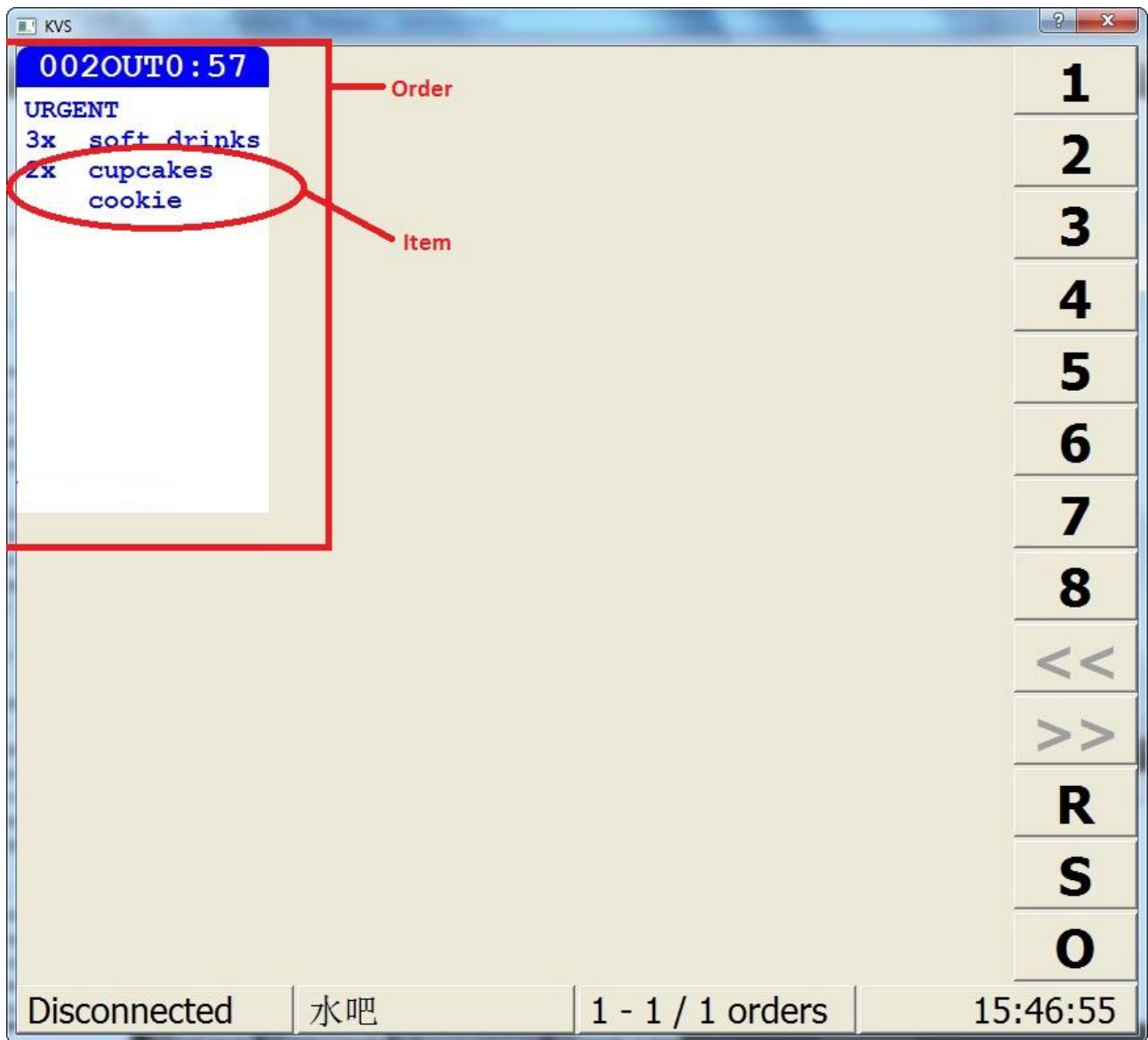


Figure 2.1.1 Concept of the order and the item

3. Heng Yu KVS user interface

There are two user interfaces for touch version and non-touch version of Heng Yu KVS device.

3.1 Touch KVS



Figure 3.1.1 The touch version of Heng Yu KVS

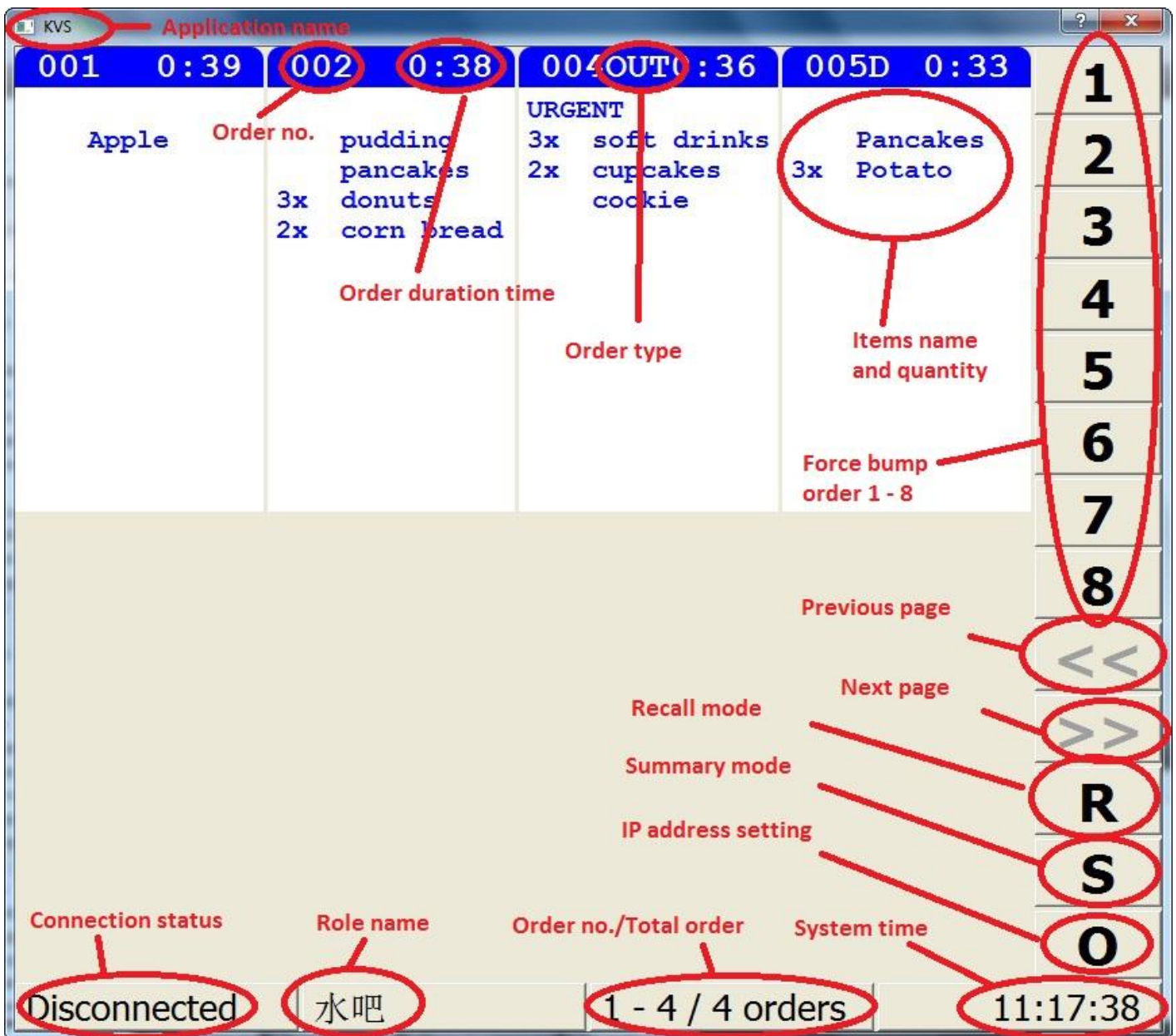
3.2 Non-touch KVS



Figure 3.2.1 The non-touch version of Heng Yu KVS

3.3 Description of user interface

3.3.1. Touch version



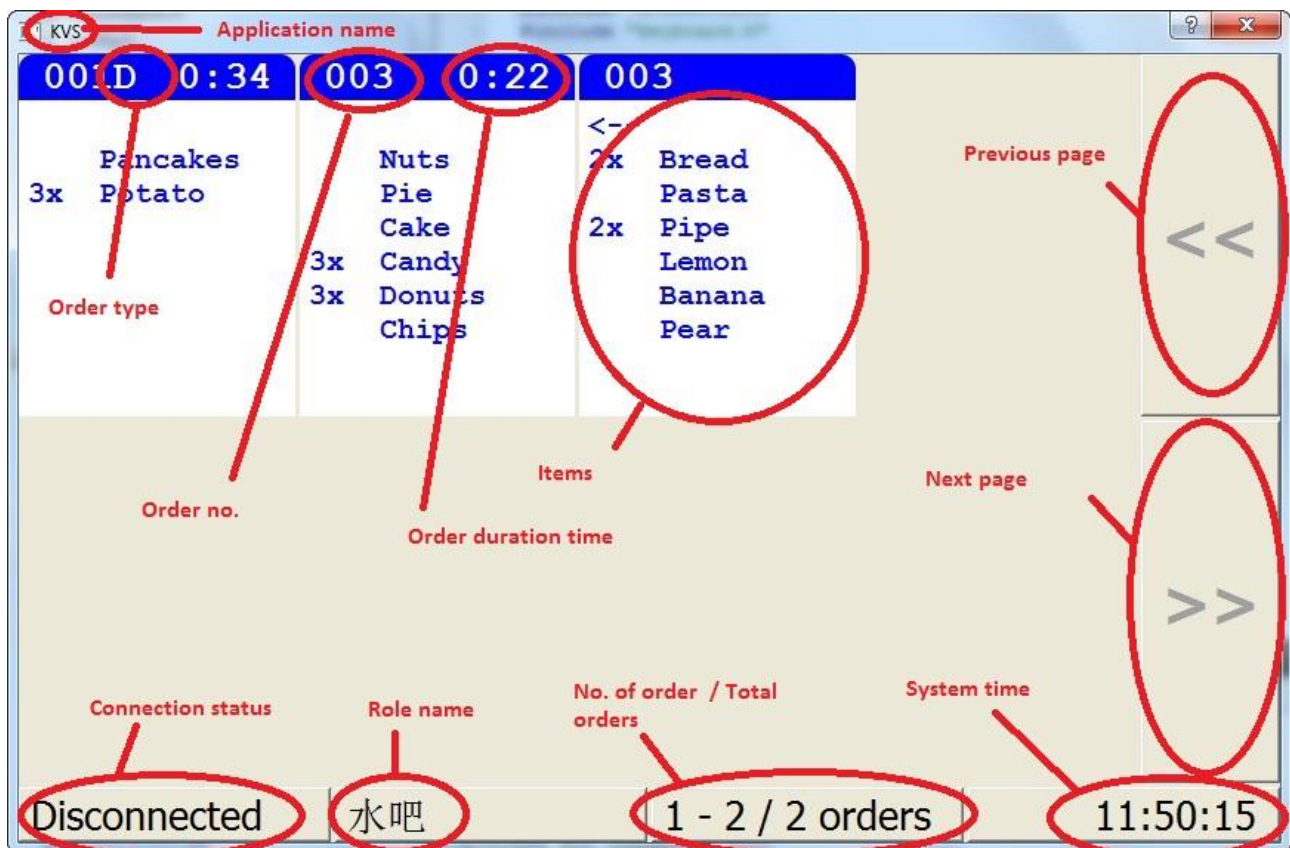
Connection status – If the KVS device connects with dispatcher, then it changes to “connected”, Otherwise “Disconnected”

Role name – the name of this KVS. It is easily to change the name in config.ini

Order type - “OUT” is take away, “D” is dive in

Force bump – The order no. 1 – 8 can be removed forcibly by clicking 1-8 button. But the order does not print out.

3.3.2 Non-touch version



4. Heng Yu Dispatcher

The Heng Yu dispatcher is the heart of the Heng Yu KVS. It acts as a server to do the following function.

1. Collects the orders from POS, organizes them and converts Heng Yu commands and delivers the commands to Heng Yu KVS devices.
2. Cancels the order
3. Categorises all foods in this system to decide which food item is delivered to the corresponding Heng Yu KVS device.
4. Maintains the connection among KVS devices.

It is easily to modify the setting of dispatcher and food categories by modifying the dispatcher.ini and food.ini respectively.

4.1 food.ini

The following is the example of food.ini.

[FoodMenu]

“Total” in [FoodMenu] is the total number of food. Now is 2.

Total = 2

[Food-1]

“Name” is the food name

“Cat” is to set the category number of this food. This category is used by dispatcher to determine the delivery of the food.

Name=Pasta

Cat=3

[Food-2]

Name=Salad

Cat=2

4.2 dispatcher.ini

[Dat]

Path=C:\KVS_System\GeneralKVS\GeneralDispatcher

[System]

Description: Enable log

EnableLog=1

Description: Buffer Min

BufferMin=3800

Description: order buffer , 50 orders

BufferOrderCount=50

Description: Order timeout in non Touch KVS. In minutes.

NonTouchTimeoutMin = 6

Description: Order timeout in Touch KVS. In minutes.

TouchTimeoutMin = 12

[KVS]

Description:

ID= IP,touch,name

IP: IP address of the KVS

touch: 1 - a touch KVS

0 - a non-touch KVS

name: name/role of the KVS

Total: Total number of KVS devices will be connected

Total=3

1=192.168.1.92,0,HengYu_KVS_2

2=192.168.1.91,0,HengYu_KVS_1

3=192.168.1.90,1,HengYu_KVS

[Category]

Description:

ID= cat_name,kvs_id,kvs_row,printout,support_2_kvs

cat_name: category name

kvs_id: the index used in [KVS] section.

kvs_row: 0 - full screen, i.e. there is only 1 queue

1 - the food item will be shown in the top row

2 - the food item will be shown in the bottom row

printout: 1 - the item is printed in the touch KVS's printer after pump out

0 - the item is not printed in the touch KVS's printer after pump

out

support_2_kvs: 1 - the item will be shown in the both non-touch KVS and touch KVS.

0 - the item will be only shown in the KVS specified.

Total=2

1=CAT2,2,2,1,1

2=CAT3,3,0,1,0

[KVS_Port]

1=59999

2=59999

3=59999

;optional, for development use

5. Heng Yu KVS mode

KVS is a system to show the orders from the front POS systems to the back kitchen system through the 10/100Mbps network interface. KVS includes three display modes: Display Mode, Display Recall Mode & Display Summary Mode.

5.1 Display Mode

Display Mode is used to display the kitchen orders (Figure 5.1.1 and Figure 5.1.3). The page is separated into four columns by two rows. It includes total eight order cells. In each cell, it contains the timer, order ID, ordered items & its quantity. The timer is counting up in second unit. When it reaches and over the pre-defined duration, the color of its cell head is changed to red (Figure 5.1.2 and Figure 5.1.4). It represents the cooking time for this order is too long. The kitchen staff should hurry up to complete this order.

Touch version

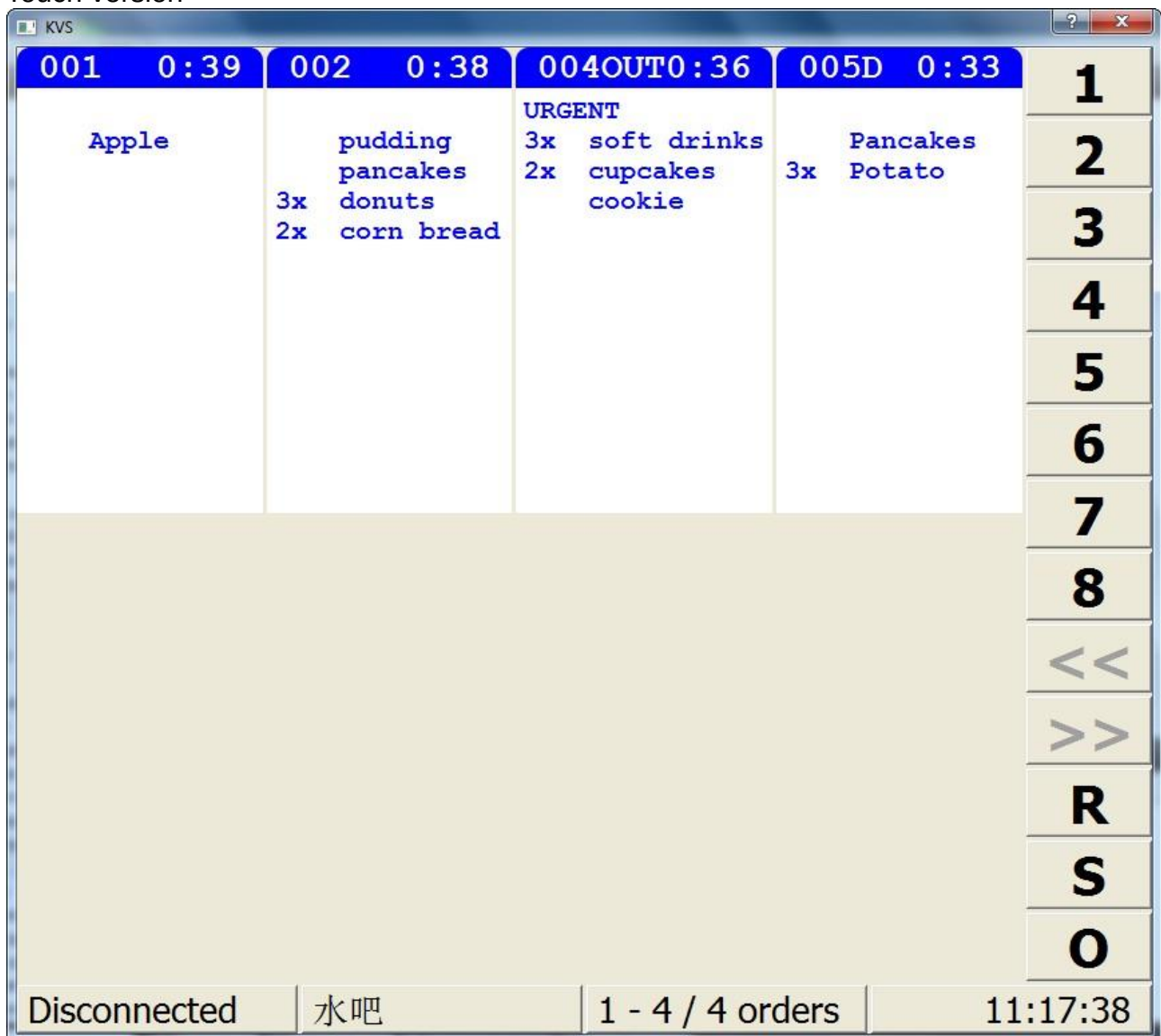


Figure 5.1.1 Before predefine order duration time in touch version

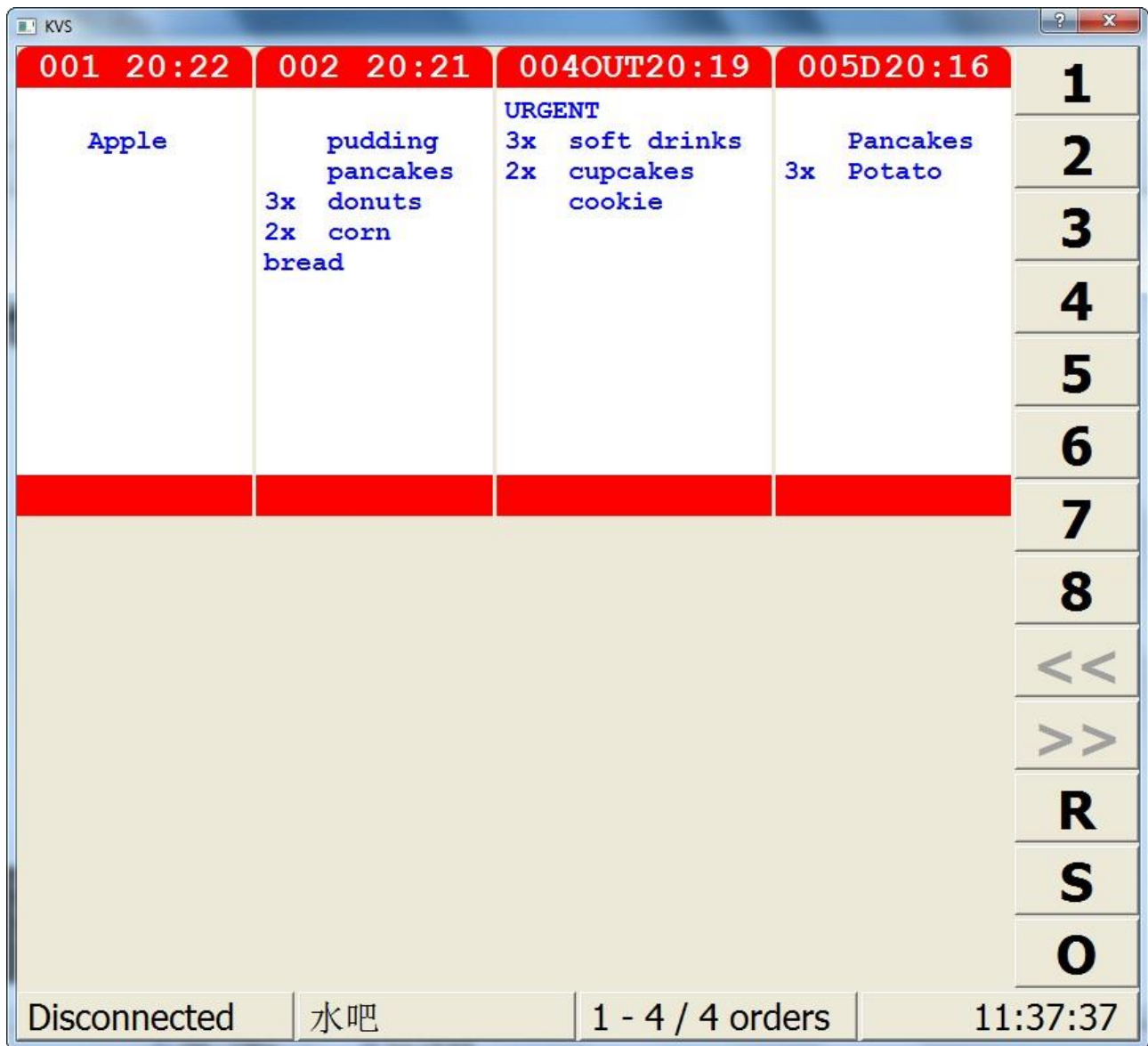


Figure 5.1.2 After pre-defined order duration time in touch version

Non-Touch version



Figure 5.1.3 Before predefine order duration time in non-touch version



Figure 5.1.4 Before predefine order duration time in non-touch version

As the number of orders is over the maximum order per page, the new order will be added in the next page. The two indicators (Previous << and Next >>) will be enabled so that the staff can click them on the screen or press the “P” or “N” button on the keyboard to read the content of the previous or next page respectively.

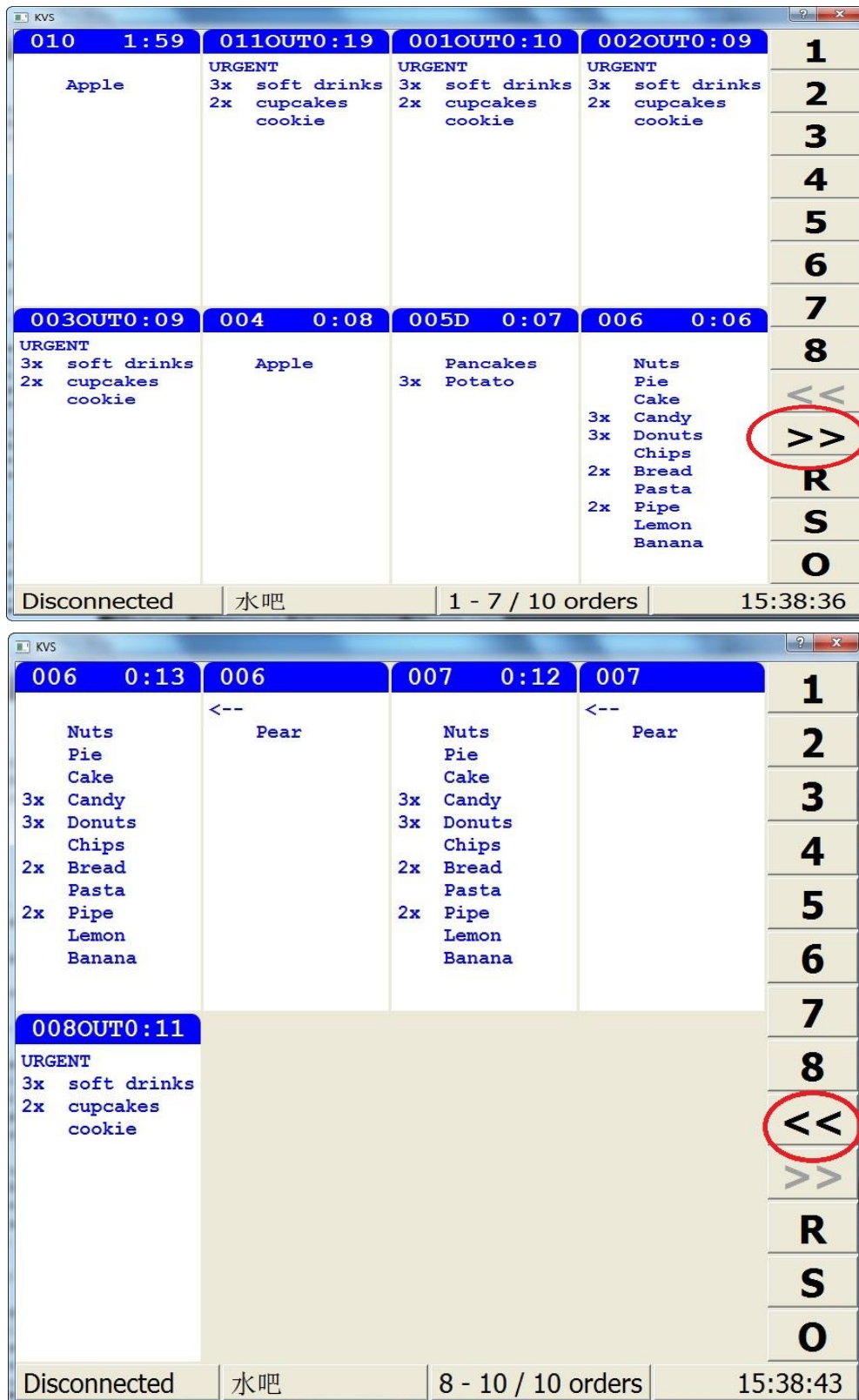


Figure 5.1.5. ">>" and "<<" button are enabled in touch version

Non-touch KVS



Figure 5.1.6. “>>” and “<<” button are enabled in nontouch version

The order can be bumped out by clicking them twice (by default). See Figure 5.1.7 and Figure 5.1.8. The first click is to select the order, the second click is to bump out the order.

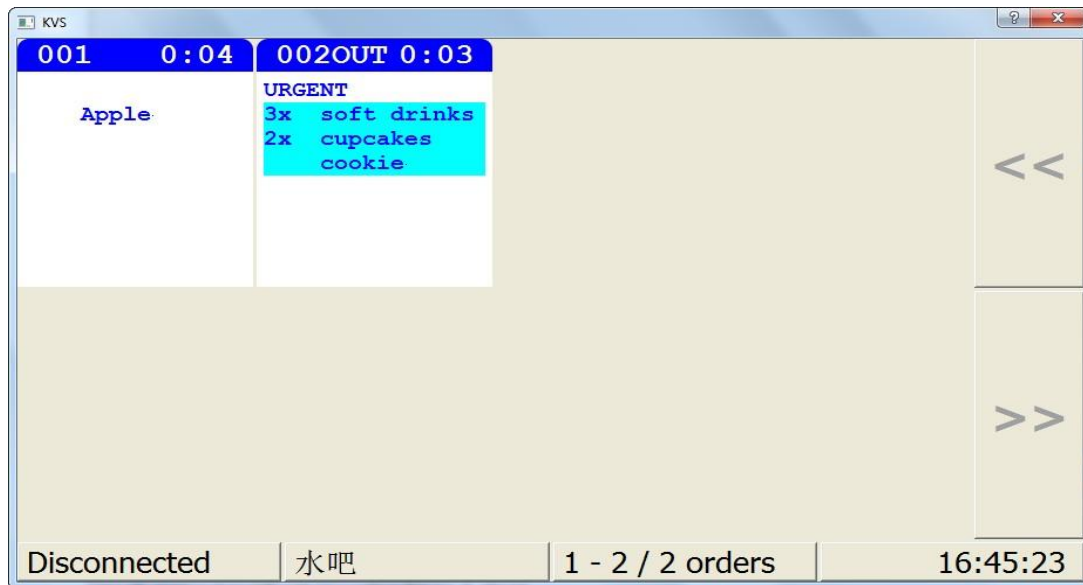


Figure 5.1.7 the second order is selected by the first click

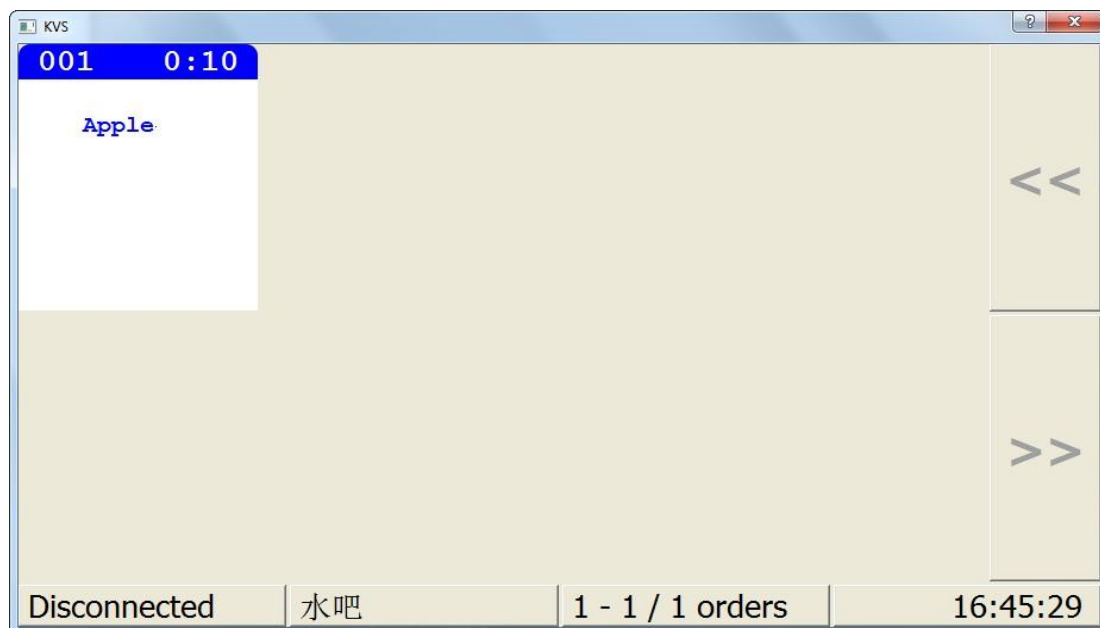


Figure 5.1.8 the second order is bumped out by the second click

5.2 Display Recall Mode

Display Recall Mode is used to show the orders which are bumped (deleted). Its layout is similar to the Display Mode. It also separate the page into four columns by two rows. The obvious different with the Display Mode is the head color which is green. Also, the data content is different that includes the started time and bumped time as well (Figure 5.2.1). The Recall mode can be shown by clicking “R” button on the screen or press “R” button from the keyboard.

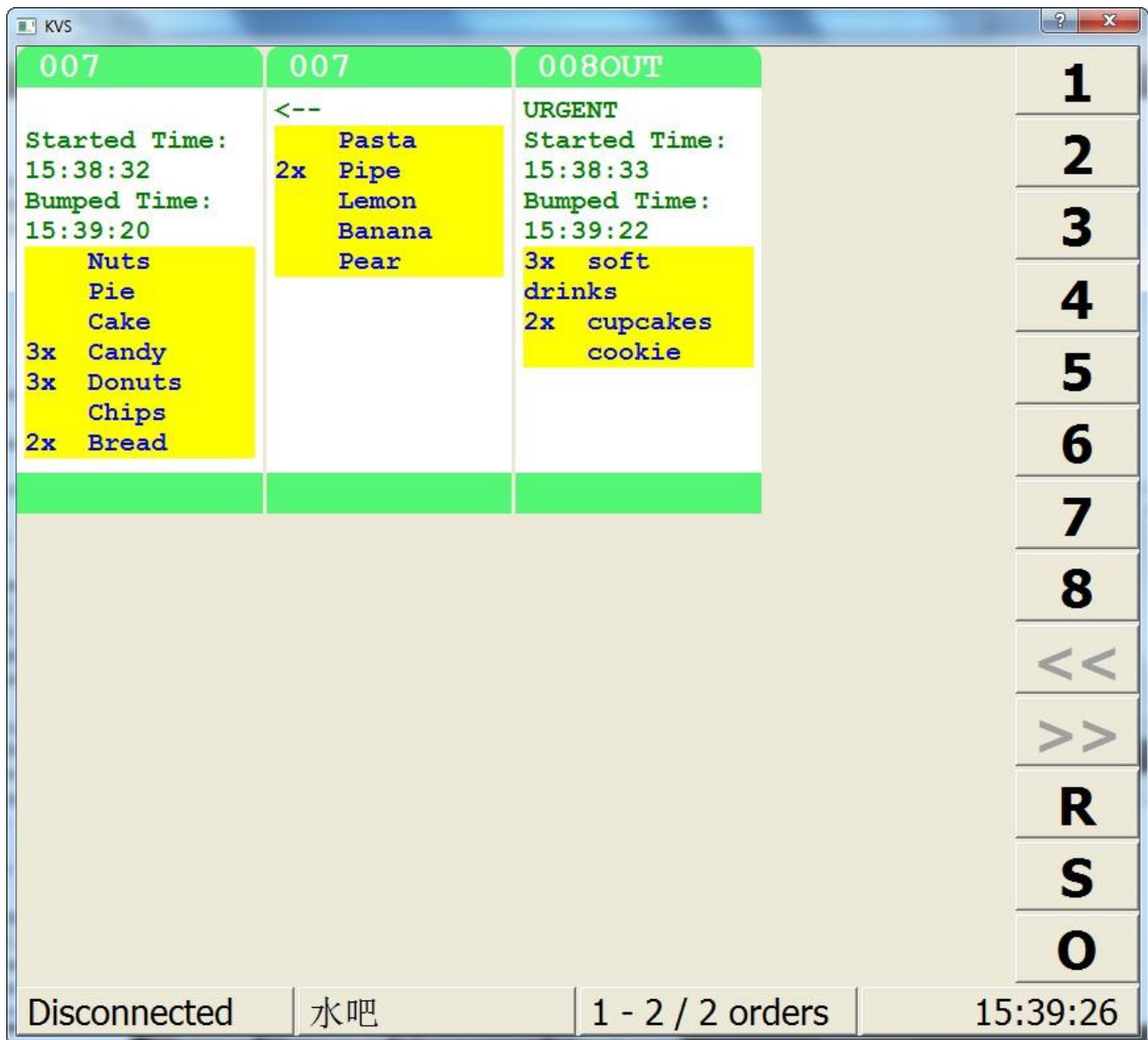


Figure 5.2.1 Recall mode

The bumped order can be restored by clicking it in recall mode(Figure 5.2.2). The restored order is returned to the display mode(Figure 5.2.3). The restored order is written to "Restore" .

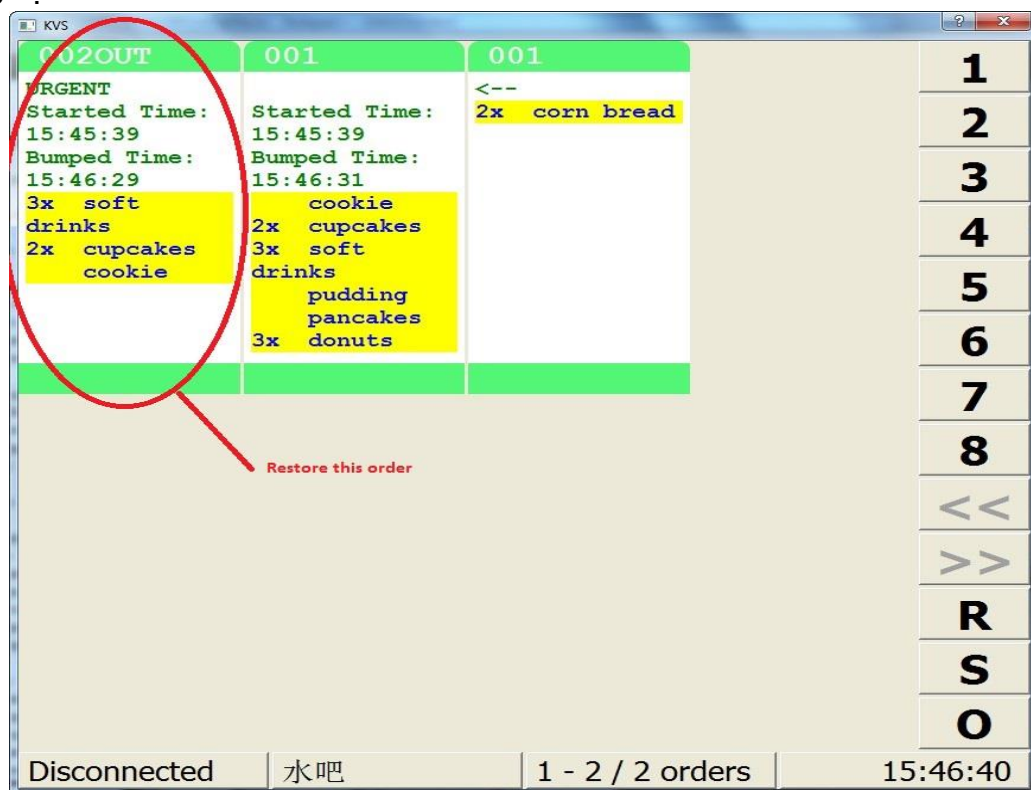


Figure 5.2.2. Restore the order by clicking it

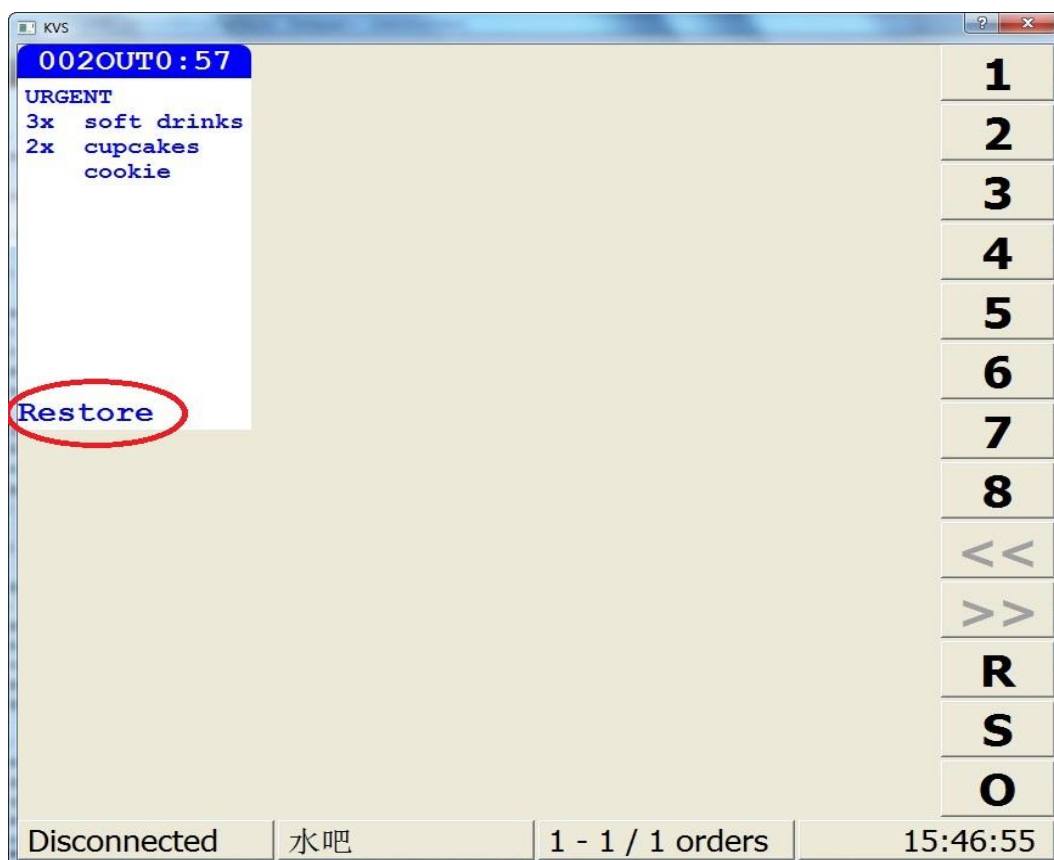


Figure 5.2.3. the restored order in display mode

5.3 Summary mode (Touch version only)

The Touch KVS can make a statistic about the total number of each item bought. The summary information can be shown by clicking "S" button on the screen or press "S" button from the keyboard.

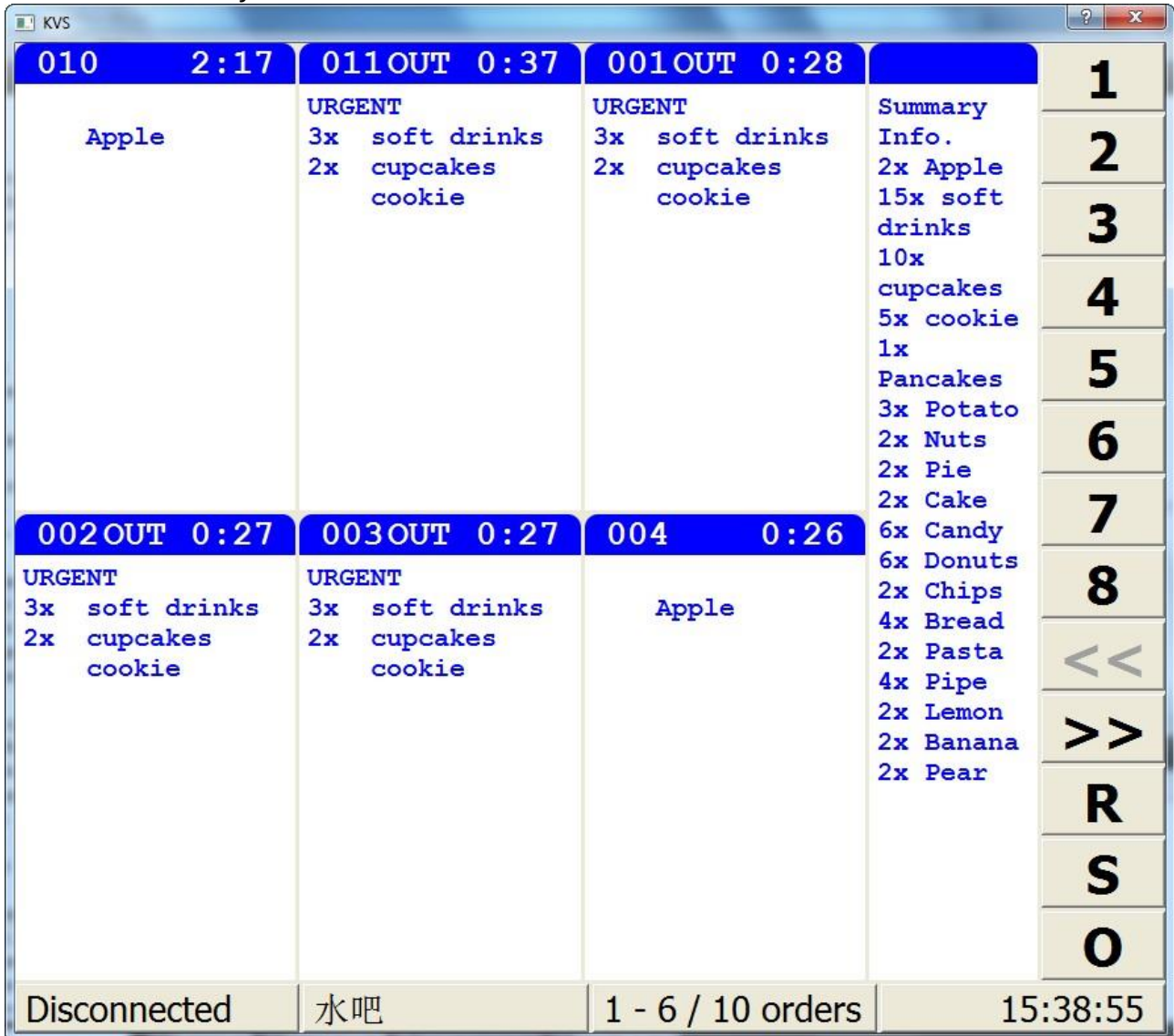


Figure 5.3.1 The summary mode

5.4 Itemization

In general case, only the order is selected to bump out. Heng Yu KVS supports single item of an order to be bumped. It is optional and configured in INI file.

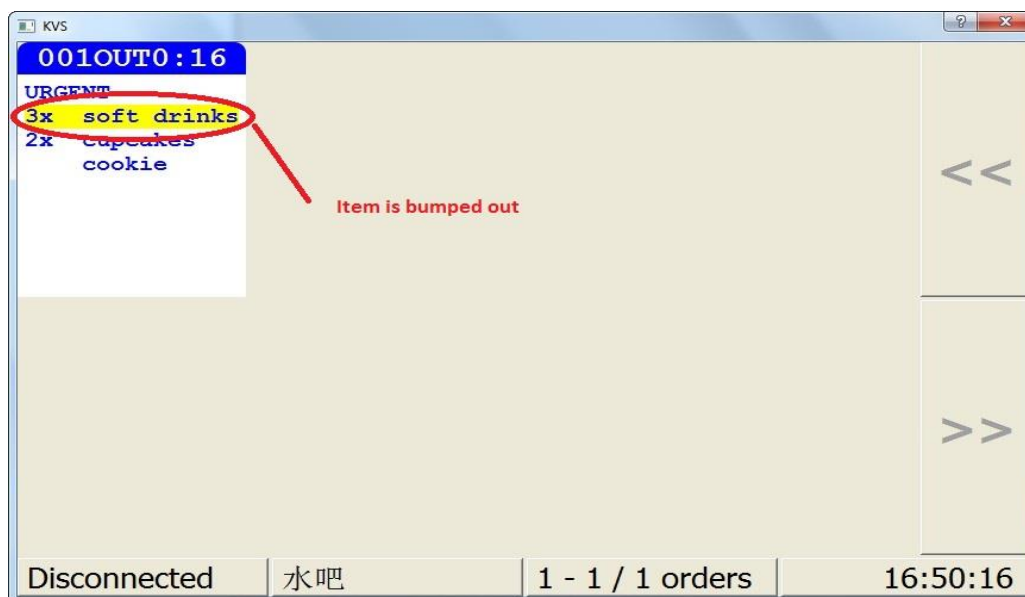
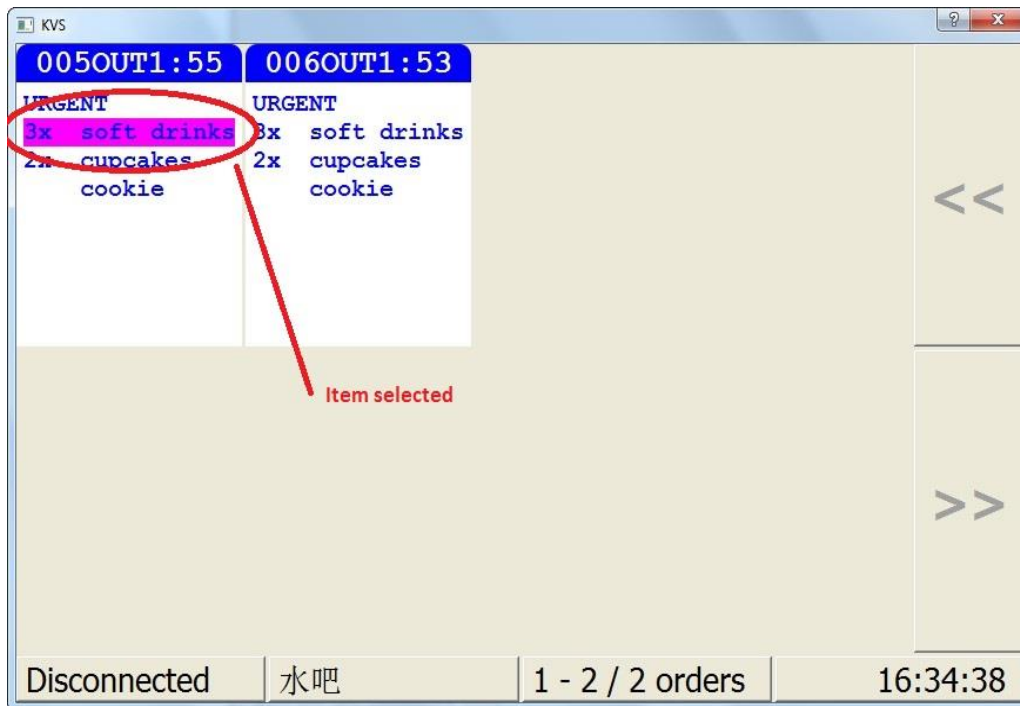


Figure 5.4.1 The item is selected

Figure 5.4.2 The item is bumped out

Right arrow : Navigate right the order

Left arrow : Navigate left the order

Up arrow : Navigate up the items in the selected order

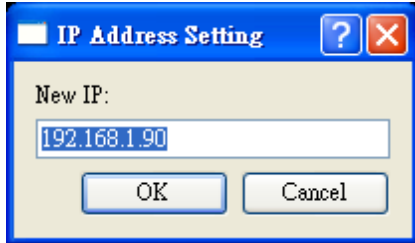
Down arrow : Navigate down the items in the selected order

"E" button : highlighted the item and bumped out.

“Esc” button : return to normal

5.5 Change the IP address

The KVS device need to be changed its own IP address in different environment. It is easily to change the IP address by clicking the “O” button or press “O” button from keyboard. The dialog for changing IP is prompted.



Input the new IP address, and click the “OK” button. The KVS device will restart automatically, and the new IP address will be activated.

6. Heng Yu KVS Configuration file

The KVS device is easily modified the appearance, behaviours and information. There is one file “ConfigFile.ini” defines the characteristic of its own KVS. ConfigFile.ini are included three sections and they are [System], [Operation] and [Feature].

Item description:

[System] : It includes the fundamental system information of the KVS such as IP address.

[Operation] : It includes the operation information of the KVS such as the category supported.

[Feature] : It includes the operation features of KVS

[System]

IP

- The IP address of KVS

GATEWAY

- The gateway address of KVS

Type

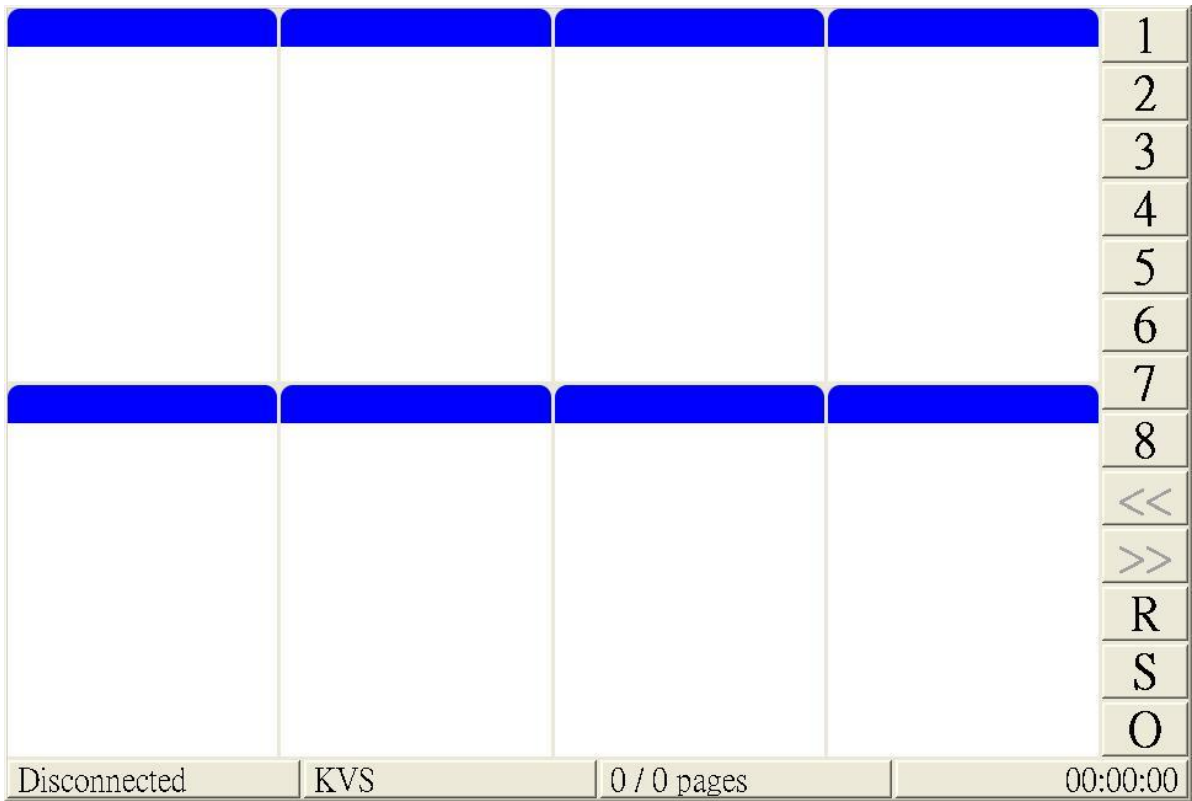
- The type of KVS
- 0: Touch version, 1: Non-touch

Style

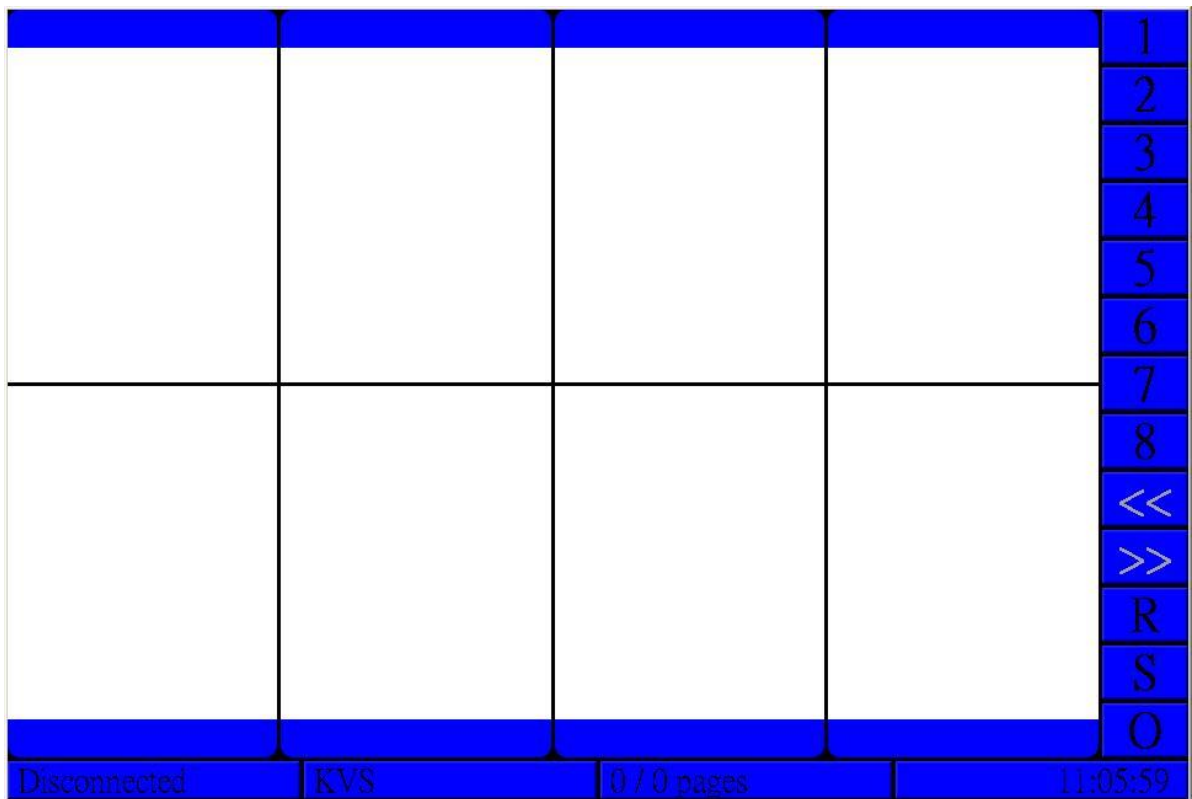
- The outlook style of KVS

				1
				2
				3
				4
				5
				6
				7
				8
				<<
				>>
				R
				S
				O
Disconnected	KVS	0 / 0 pages	11:01:00	

- 0: Classic (The following is the touch version output)



- 1: Trendy (The following is the touch version output)



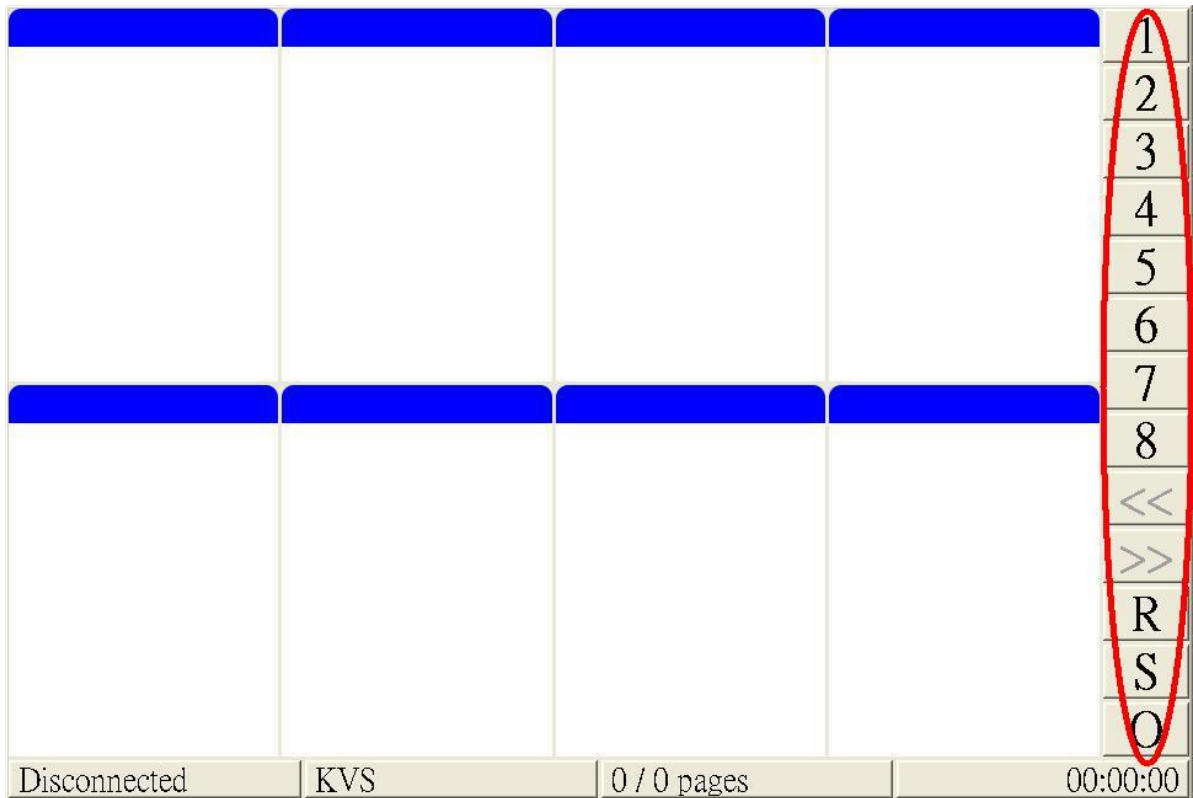
- 2: Modern (The following is the touch version output)

Role

- The role name of KVS, which will be shown in the bottom of KVS.

TouchFont

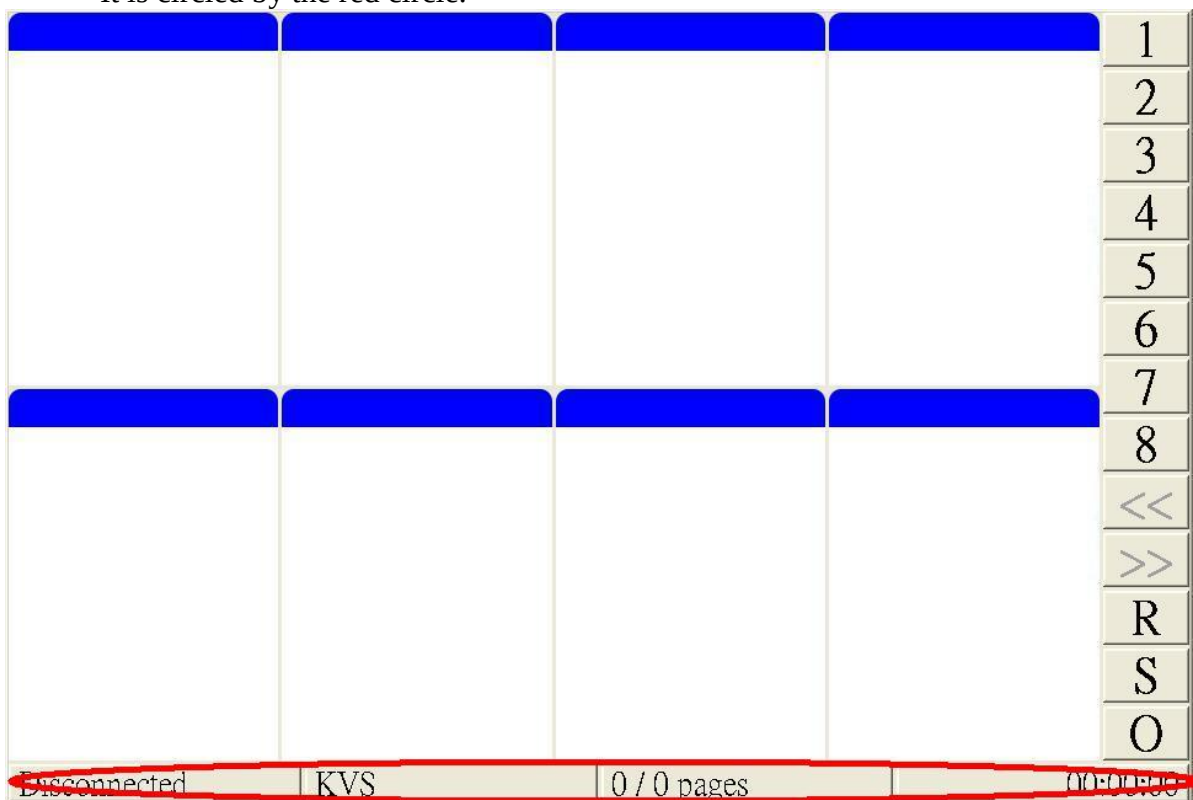
- The font size in the touch bar, which is only shown in the touch version KVS.



- It is circled by the red circle.

StatusFont

- The font size in the status bar
- It is circled by the red circle.



LabelFont

- The font size in the label of each cell

10001 0:01	10001			1
Apple juice	Pasta			2
				3
				4
				5
				6
				7
				8
				<<
				>>
				R
				S
				O
Connected	KVS	1 / 1 pages		11:18:28

- It is circled by the red circle.

TextEditFont

- The font size in the content of each cell
- It is circled by the red circle.

10001 0:01	10001			1
Apple juice	Pasta			2
				3
				4
				5
				6
				7
				8
				<<
				>>
				R
				S
				O
Connected	KVS	1 / 1 pages		11:18:28

[Operation]

CAT

- The dedicated category to be supported
- If it is NULL, all category items are responded while the BUMP or RESTORE action is happened.
- If it is defined such as CAT5, only the item with the category CAT5 will be responded while the BUMP or RESTORE action is happened.

Timeout

- Unit in minutes. It sets the timeout of an coming order.

RestoreTime

- Unit in minutes. It determine the order to be valid in processOrder.txt if the starting time of an order is within this value.

RestoreCount

- The maximum number of order can be accessed in processOrder.txt.

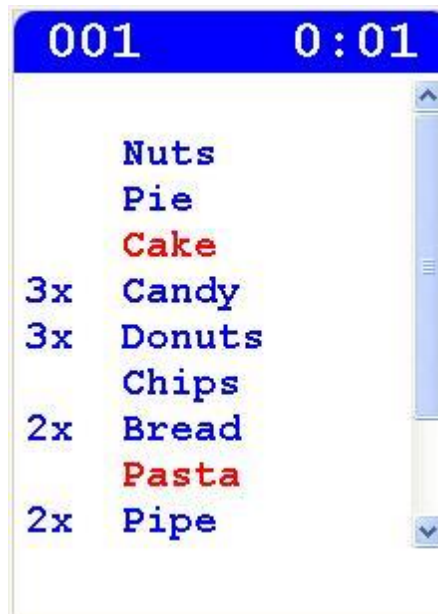
ActiveMsg2Server

- Enable to send the BUMP / RESTORE message to the server
- 0: Disable. It is no message to the server while the BUMP / RESTORE action is happened.
- 1: Enable: The message will be sent to the server while the BUMP / RESTORE action is happened.

[Feature]:

CellDisplay

- The food display method in the cell
- 0: Scroll bar supported: All items in the order will be shown within one cell. If the item content is over a cell, the vertical scroll will be shown on the right.



- 1: Multi-cell supported: All items in the order will be shown in the minimum number of cell. If the content is over is a cell, the next cell will be used to show the rest content.

001	0:01	001
	Nuts Pie Cake 3x Candy 3x Donuts Chips 2x Bread Pasta	<-- 2x Pipe Lemon Banana Pear

001	0:01	001	001	001	1
Nuts	Pie	Cake	3x Candy		2
					3
					4
					5
					6
					7
001	001	001	001		8
3x Donuts	Chips	2x Bread	Pasta		<<
					>>
					R
					S
					O
Connected	KVS	1 / 2 pages		11:45:01	

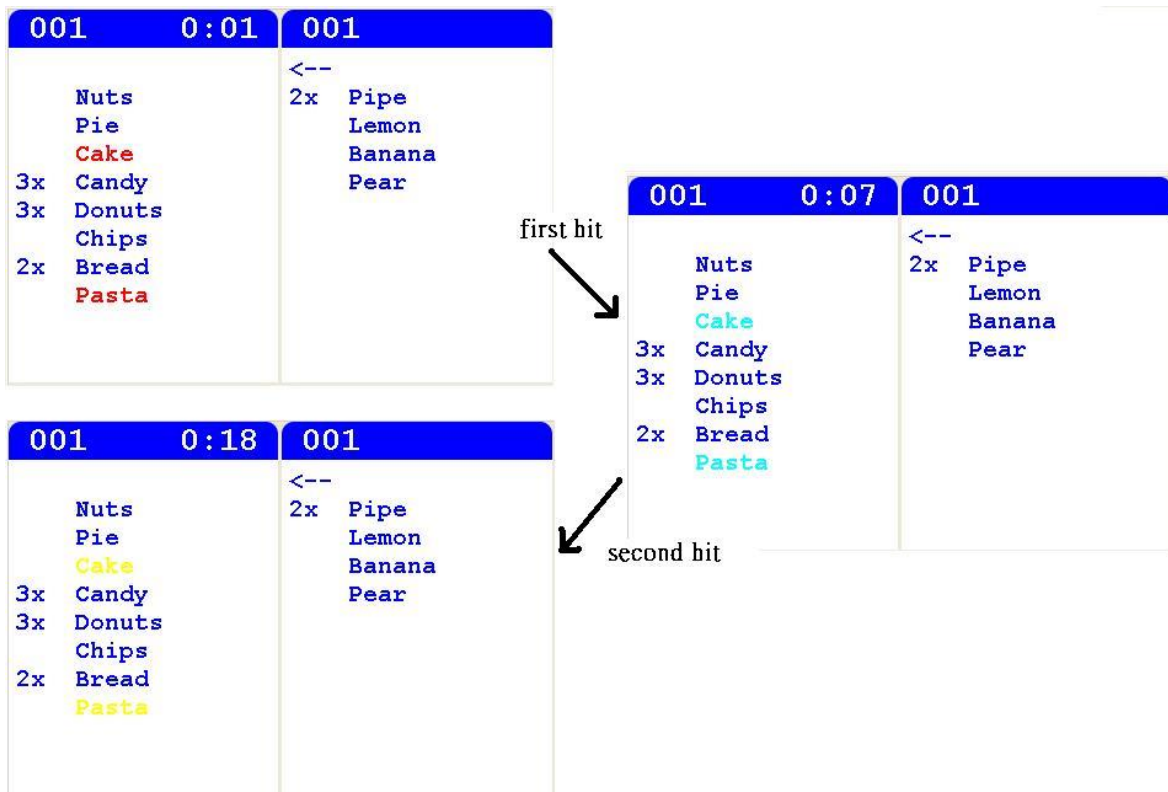
- 2: Single item per cell supported: Only one item will be shown per cell.

TimeoutFlash

- Enable the timeout flash indicator.
- 0: Disable. The upper bar of cell will keep in red color if the order is timeout.
- 1: Enable. The upper bar of cell will keep flashing if the order is timeout.

TwoHitBump

- Enable the two-hit bump feature which the order will be completely bumped by two hit action. The first hit action will change the background / text color of the item, that informs other chefs someone is cooking the highlighted item. The second hit action will bump the item. That means the chef completes to prepare the item.



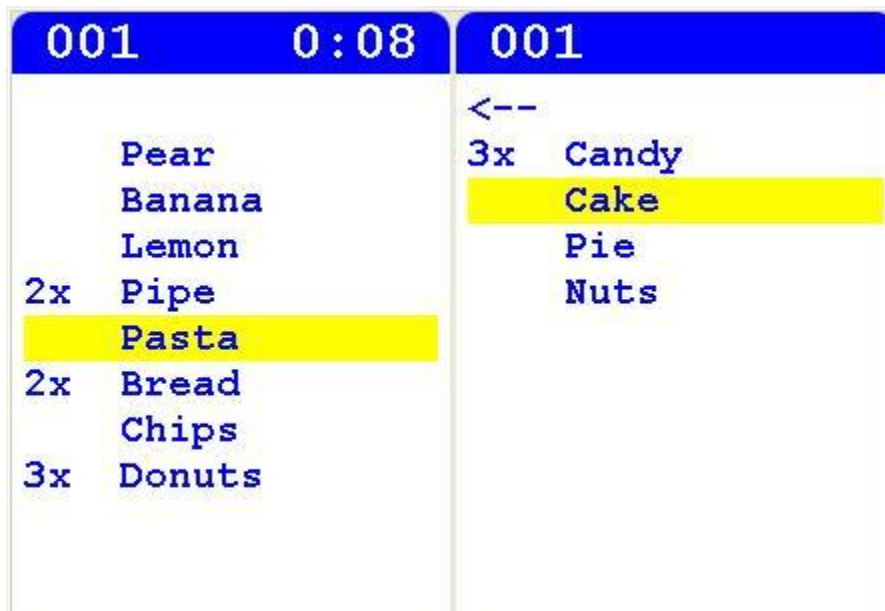
- 0: Disable. Single hit will completely bump the item.
- 1: Enable. The two-hit bump is supported.

MergeItem

- Merge the item if the previous order number and the current order are the same.
- 0: Not supported. 1: Supported

ItemHighlightMethod

- The item is highlighted by the text or the background



- 0: Highlighted by the background
- 1: Highlighted by the text

001	0:18	001
	Nuts	<--
	Pie	2x Pipe
	Cake	Lemon
		Banana
3x	Candy	Pear
3x	Donuts	
	Chips	
2x	Bread	
	Pasta	

Itemization

- Itemization means only one item of an order to be selected and bumped each time. It is supported in both of Scroll bar and Multi-cell display modes.
- 0: Disable. 1: Enable.

VisibleCell

- The cell is only visible if the content is existed.
- 0: All cells are visible no matter the cell has the content or not.

001	0:02	001			1
		<--			2
Pear		3x Candy			3
Banana		Cake			4
Lemon		Pie			5
2x Pipe		Nuts			6
Pasta					7
2x Bread					8
Chips					<<
3x Donuts					>>
					R
					S
					O
Connected	KVS	1 - 1 / 1 orders			12:16:23

001	0:03	001	1
		<--	2
Pear		3x Candy	3
Banana		Cake	4
Lemon		Pie	5
2x Pipe		Nuts	6
Pasta			7
2x Bread			8
Chips			<<
3x Donuts			>>
			R
			S
			O
Connected	KVS	1 - 1 / 1 orders	12:16:52

- 1: Only the cell with the content to be visible

7. FTP access

FTP server feature is supported in the KVS device. The FTP client can be connected through normal FTP client software.

8. Firmware and software Upgrade

It is easily to update the firmware, IP address and gateway address of the KVS device through USB thumb drive or put the new firmware to KVS device through FTP.